

# Elecksys Catalogue

**Acousto - Optics**

2020 | 2021

# Company Profile

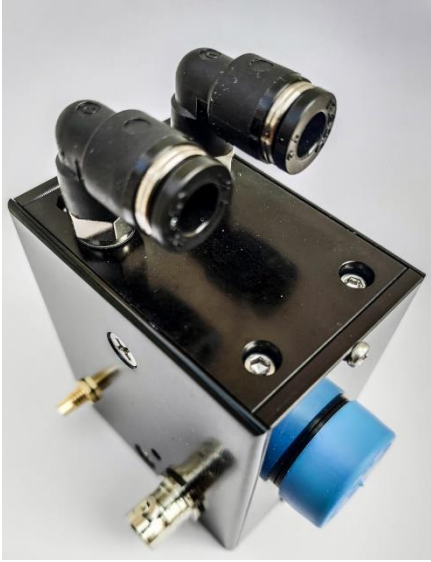
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**Eleksys Engineering Co.** (or “**Eleksys**”), is the leading global consultant, supplier & exporter bringing you high quality Laser Optics, Acousto-Optics, Laser Safety products and IT-based Industrial solutions. Since October 2013, **Eleksys** (Earlier “**RSH Optronics**”) is managed by experienced professionals with exceptional engineering and management backgrounds.

Headquartered in Ajmer, Rajasthan, India, **Eleksys** is serving a wide range of markets and applications – range from Research & Development, Medical & Life Sciences to Industrial & Military. In order to meet the customers’ requirements, we also partnered with best to make sure the customer gets the best. But more than just products, we offer Electrical & Laser Engineering solutions with superior quality, best value, support and commitment.

Our objective is to excel by meeting our National & International customer demands through employee dedication to continuous improvement.





# Index

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Company Profile	02
Benefits	03
Q-switches	04
Contact Address	06

## Benefits

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- ✚ Superior Optical Quality & Reliability.
- ✚ Easy Exchange & Return.
- ✚ Lifetime Compatibility.
- ✚ Best Price in getting your Acousto -  
Optics demands from us.



# Q-switches

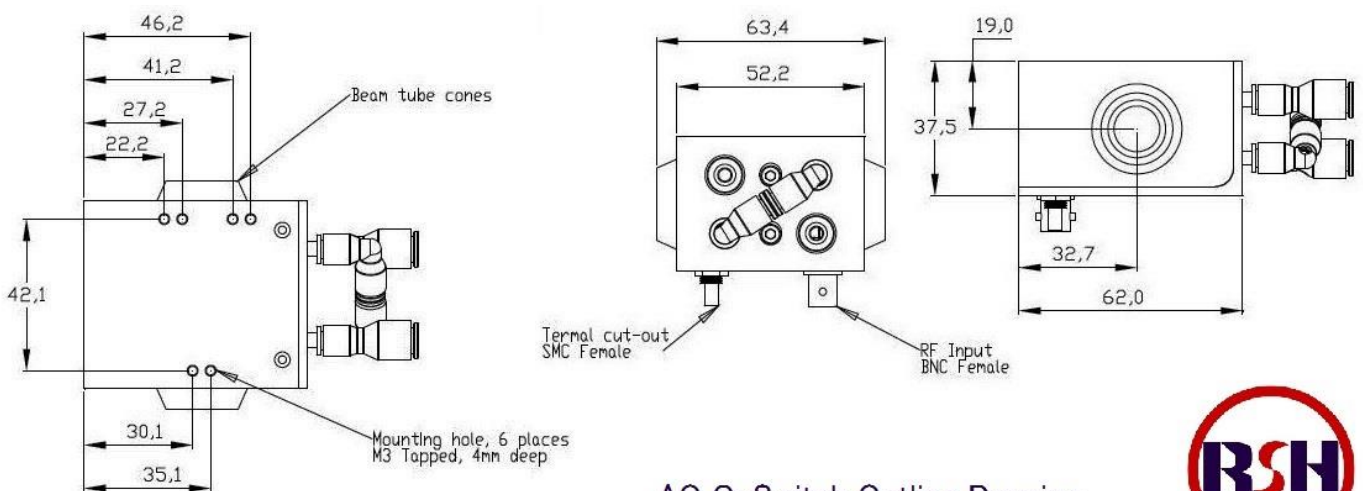
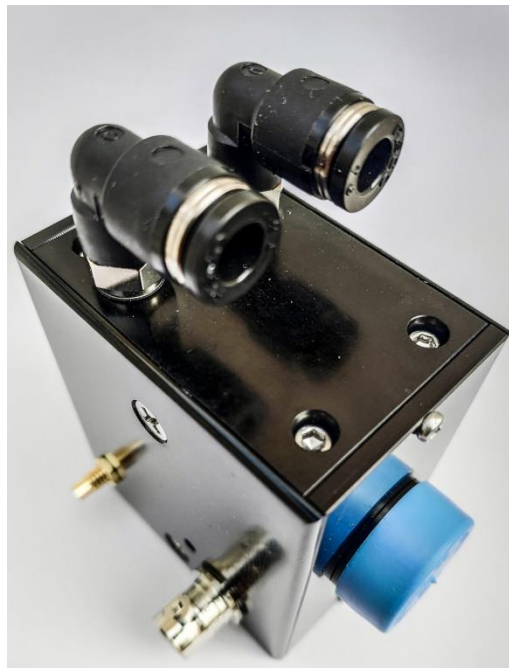
This Q-switch is a water-cooled Q-switch to be used in high power Nd: YAG laser systems or equivalent.

## Key Features:

- Superior Corrosion Resistance.
- Water cooling.
- Very low insertion loss.
- High damage threshold.
- Push fit water connectors.
- High Efficiency.
- Up to 100W RF power handling.

## Application

1. Material Processing
  - Marking
  - Engraving
  - Scribing
  - Surface Treatment
2. Medical (Surgery)
3. Scientific (PIV)



AO Q-Switch Outline Drawing



Specifications	Standards
Interaction Material	Fused Silica
Wavelength	1064nm
Damage Threshold	$> 1\text{GWcm}^{-2}$
Transmission (Single Pass)	$> 99.5\%$ with hard V-coating.
Static Insertion Loss	$\leq 6\%$ at 50W laser power
V.S.W.R.	$< 1.2:1$ ( $< 1.4:1$ at 50W RF power)
RF Power Rating	<ul style="list-style-type: none"> <li>• 50W cw for Compressional acoustic mode.</li> <li>• 100W cw for Shear acoustic mode.</li> </ul>
Water Flow Rate	$> 190\text{cc/minute}$
Water-cooling Channel Material	Aluminium, Stainless Steel
Operating Temperature	10 to 40° C
RF Connector	BNC
Thermal Security Interlock/Connector	SMC
Operating Mode	Raman Nath

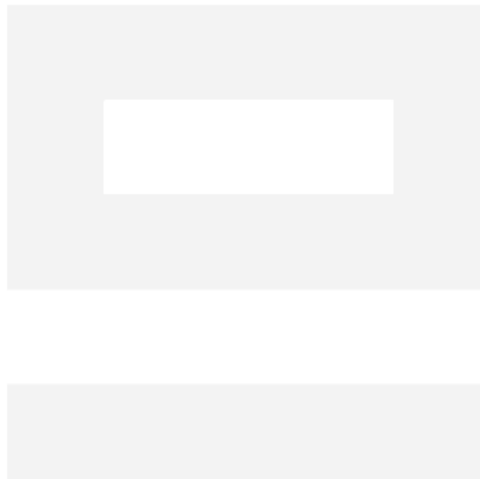
## Ordering Q-Switch

### xQS##-yA-z-p1064

Where

- x = Material (FS or CQ)
  - The material would be Fused Silica or Crystalline Quartz.
- ## = Carrier Frequency in MHz (27.12)
- y = Active Aperture in mm (1.6, 2, 3, 4, 5, 6.5 & 8)
- z = Acoustic Mode (C or S)
  - The available acoustic mode will be Compressional or Shear.
- p = Water connector (N, P, Q, U)
  - N = 4mmOD Straight Push-fit
  - P = 6mmOD Straight Push-fit
  - Q = 4mmOD Right Angle Push-fit
  - U = 6mmOD Right Angle Push-fit

**Example: FSQS27-4A-S-N1064** (Fused Silica Q-Switch, 27.12MHz, 4mm Active Aperture, Shear mode, 1064nm, 4mm OD straight push fit water-connectors, M3 mounting holes)



## Contact Address

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